

Application No. 10/798,632Client Reference No. N0186US**REMARKS****I. Status**

Claims 42, 47, 50-52, 59-61, 64-69, and 72-75 have been amended, and claims 76-80 have been added. No new matter has been added as a result. Claims 1-41 have been previously canceled. Accordingly, claims 42-80 are currently pending.

**II. Rejections Under 35 U.S.C. § 103**

Claims 42-46, 48-49, 51-53, 55-56, 58, 60-62, 67, and 75 were rejected under 35 U.S.C. §103(a) as being unpatentable over Graf, et al. (U.S. 4,645,459) in view of Lechner (U.S. 2003/0059743). Claims 47, 50, 54, 57, 59, 63-66, and 68-74 were rejected under 35 U.S.C. §103(a) as being unpatentable over Graf, et al. in view of Lechner and Huston, et al. (U.S. 6,146,143).

Claim 42 and Dependents

Claim 42 recites, *inter alia*, "producing, by a map developer, a source geographic database containing data representing a real-world locale including (i) geographic coordinates of positions of roads, (ii) street names of the roads, (iii) address ranges along the roads, (iv) turn restrictions at intersections of the roads, (v) road connectivity, and (vi) road shape," "transforming, by the map developer, the data representing the real-world locale into data representing an imaginary geographic locale to form a template geographic database," and "providing, by the map developer to a game developer, the computer-readable medium containing the template geographic database, the game developer being separate from the map developer." The combination of the cited references does not teach or suggest at least these features.

Graf, et al. disclose a computer generated synthesized imagery ("CGSI") system that allows a scene to be constructed by placing high fidelity objects on a specified surface or background. (Graf, et al., column 2, lines 50-60). The system is used for generating simulator gaming areas, which may be fictitious. (Graf, et al., column 4, lines 40-50). The system uses an object library, which normally comprises photographic matter, to store images from individual real-world elements for use in generating a gaming area. (Graf, et al., column 6, lines 53-57).

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Lechner discloses automatically generating a terrain model for display during a simulated flight along a predefined mission route. (Lechner, Abstract). The Background section of Lechner discloses a terrain model designer generating a terrain model for display during flight simulation. (Lechner, paragraphs [0001] and [0003]). The terrain model designer may obtain terrain source data from electronic collections of terrain data that may be available from, for example, the Joint Services Imaging Processing Station, the Gateway Data Navigator, or the United States Imagery and Geospatial Information Services. (Lechner, paragraphs [0006]-[0007]).

However, the cited references do not teach or suggest a source geographic database containing data representing a real-world locale including (i) geographic coordinates of positions of roads, (ii) street names of the roads, (iii) address ranges along the roads, (iv) turn restrictions at intersections of the roads, (v) road connectivity, and (vi) road shape.

Also, the combination of Graf, et al. and Lechner does not teach or suggest *transforming* data representing a real-world locale *into* data representing an imaginary geographic locale. Graf, et al. disclose a fictitious battlefield area as a gaming area, but there is no teaching or suggestion of converting or transforming data representing a real-world locale into data representing an imaginary locale. The developers in Graf, et al. may create a fictitious world by picking and choosing some real-world images, but there is no teaching or suggestion of starting with a data structure of a real-world locale and transforming or changing that data structure into an imaginary geographic locale.

Furthermore, there is no teaching or suggestion of transforming the real world locale into an imaginary geographic locale by a map developer in which a game developer is separate from the map developer. Both Graf, et al. and Lechner disclose simulator designers, and, therefore, the generation of any alleged imaginary geographic locale would be by a simulator designer, not a map developer. Lechner mentions a terrain model designer that obtains data from electronic collections of terrain data (The Examiner notes that these collections correspond to a separate map developer, Office Action, page 4) to construct a terrain model for simulated flights. However, there is no teaching or suggestion that the electronic collections of terrain data or those that maintain the electronic collections transform data

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representing a real-world locale into data representing an imaginary geographic locale.

The Examiner asserts that every map developer can create a real or imaginary map and making an imaginary map based on a real map is a design choice strictly dependent on the map developer's vision of the final product. (Office Action, page 3). Firstly, just because it may be possible for one to perform the claimed features does not mean that the references teach or suggest the claimed features. Secondly, transforming data representing a real-world locale into data representing an imaginary geographic locale is not a mere design choice. By having a map developer (which produces map data corresponding to real-world locales) transform real-world locale data into a template representing an imaginary geographic locale and provide the template to game developers advantageously facilitates development of computer games. (Applicants' specification, page 2, lines 7-23; page 7, lines 10-23; page 18, lines 23-29).

Additionally, the combination of Graf, et al. and Lechner does not teach or suggest a template geographic database. The Examiner asserts that obtaining a smaller database of real world images, such as from the electronic collections of terrain data, is similar to a template geographic database. (Office Action, page 3). However, obtaining some image data is not the same as transforming data representing a real-world locale into data representing an imaginary geographic locale to form a template geographic database. There is no mention or suggestion of forming a template database used as a model for computer game development.

Accordingly, claim 42 is allowable for at least these reasons. Claims 43-58 depend, directly or indirectly, from allowable claim 42 and, therefore, are allowable for at least the same reasons.

#### Claim 59

Claim 59 recites features similar to the features of claim 42 described above. Some of the arguments made in regards to claim 42 appropriately apply to claim 59 as well. Furthermore, claim 59 recites, *inter alia*, "producing, by a map developer, a source geographic database containing data representing a road network in a real-world locale, wherein the data representing the road network include navigation-related attributes for digital route calculation and digital route guidance about the

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road network." The combination of the cited references does not teach or suggest at least these features.

Houston, et al. disclose a system for simulating the operation of a vehicle. (Houston, et al., Abstract). The system includes a computing means that presents a temporal sequence of visual images that depicts the operation of the simulated vehicle in a simulated environment. (Houston, et al., column 4, lines 20-25). However, there is no teaching or suggestion of navigation-related attributes, let alone navigation-related attributes for digital route calculation and digital route guidance about the road network.

Accordingly, claim 59 is allowable for at least these reasons.

#### Claim 60 and Dependents

Claim 60 recites, *inter alia*, "producing a source geographic database containing data representing a plurality of road segments corresponding to a road network in a real-world locale" and "transforming the data representing the plurality of road segments into data representing an imaginary geographic locale to form a template geographic database." The combination of the cited references does not teach or suggest at least these features.

Accordingly, claim 60 is allowable for at least these reasons. Claims 61-67 depend, directly or indirectly, from allowable claim 60 and, therefore, are allowable for at least the same reasons.

#### Claim 68 and Dependents

Claim 68 recites, *inter alia*, "producing a source geographic database containing data representing a plurality of road segments corresponding to a real-world locale, wherein the data representing the plurality of road segments are configured to be compiled for navigation related functions in a vehicle navigation device" and "transforming at least some data representing the plurality of road segments from the source geographic database to form a template geographic database, wherein the template geographic database contains data representing an imaginary geographic locale." The combination of the cited references does not teach or suggest at least these features.

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Accordingly, claim 68 is allowable for at least these reasons. Claims 69-75 depend, directly or indirectly, from allowable claim 68 and, therefore, are allowable for at least the same reasons.

Claim 76 and Dependents

Claim 76 recites, *inter alia*, "producing a source geographic database containing data corresponding to roads in a real world geographic locale including (i) geographic coordinates of positions of the roads, (ii) street names of the roads, (iii) address ranges along the roads, (iv) turn restrictions at intersections of the roads, (v) road connectivity, and (vi) road shape" and "transforming data representing a real-world road network structure from the source geographic database to form a template geographic database, wherein the template geographic database contains data representing an imaginary road network structure, wherein said step of transforming includes at least one of modifying of the positions of the roads and changing the street names of the roads." The combination of the cited references does not teach or suggest at least these features.

Accordingly, claim 76 is allowable for at least these reasons. Claims 77-80 depend from allowable claim 76 and, therefore, are allowable for at least the same reasons.

Furthermore, one or more of the dependent claims recite features that are independently allowable. For example, claim 43 recites, *inter alia*, "wherein the source geographic database comprises attributes suitable for providing navigation-related functions for a real-world road network." Graf, et al. mention simulator controls for guiding or moving a helicopter in any direction through the gaming area (Graf, et al., column 4, lines 50-61) and position vectors and rotational data (Graf, et al. column 16, lines 37-44), but that is not the same as a database that has attributes suitable for providing navigation-related functions, such as route calculation or route guidance, for a real-world road network.

Claim 46 recites, *inter alia*, "selecting a characteristic geographic parameter of the source geographic database," "using the selected characteristic geographic parameter and at least some data from the source geographic database when

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forming the template geographic database," and "wherein the template geographic database has a characteristic geographic parameter similar to the characteristic geographic parameter of the source geographic database." The combination of the cited references does not teach or suggest at least these features.

Claim 50 recites, *inter alia*, "wherein transforming comprises applying an operation selected from the set consisting of: altering a location of a road segment, moving locations of roads by varying distances, switching a relative vertical ordering of roads that cross one another at different elevations, and performing horizontal or rotational transformations of locations of roads." The combination of the references does not teach or suggest at least these features. Graf, et al. disclose that a simulator designer may search an object library and select which objects to place in the gaming area. (Graf, et al., column 10, lines 7-10). However, that is not the same as changing or transforming data representing real-world roads to form data representing an imaginary road structure.

Claims 54-57 recite, *inter alia*, combining road model data or 3D model data with data in a template geographic database by a map developer. The cited references do not teach or suggest these features. The generation of simulator gaming areas by simulator designers is not the same as combining road model data or 3D model data with data in a template geographic database by a map developer that is separate from a game developer.

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**III. Summary**

It is respectfully asserted that all of the pending claims are patentable over the cited references, and allowance of the pending claims is earnestly solicited. If the Examiner believes that a telephone interview would be helpful in resolving any outstanding issues, the Examiner is respectfully invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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